



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Rath et al.

Assignee: Applied Materials, Inc.

Title: A SILICON CARBIDE DEPOSITION AS A BARRIER LAYER AND AN ETCH STOP

Serial No.: 09/165,248

Filed: October 1, 1998

Group Art Unit: Unknown

Atty. Docket: AM2966

Examiner: Unknown

Santa Clara, Calif.  
November 24, 1998

COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

Attention: Manager, Application Division

RESPONSE TO NOTICE TO FILE MISSING PARTS  
OF DIVISIONAL APPLICATION - FILING DATE GRANTED

Sir:

In response to the "Notice to File Missing Parts of Application - Filing Date Granted" mailed by the United States Patent and Trademark Office on OCTOBER 1, 1998, the following documents are enclosed to complete the filing of the above-identified patent application:

**I. REQUESTED MISSING PARTS DOCUMENTS ENCLOSED:**

1. 1 COPY of Combined Declaration and Power of Attorney signed by the inventor Kegang Huang in compliance with 37 CFR 1.63 (4 pages)
2. Copy of "Notice to File Missing Parts of Application - Filing Date Granted"  
(Form PTO-1533)

**II. COPY OF CERTIFICATION OF MAILING**

Enclosed find the letter of transmittal signed by the undersigned attorney with a certificate of mailing signed by Beth Mulcahy on 10/1/1998, which letter transmitted the original signed combined Declaration and Power of Attorney of Kegang Huang. A copy of this document is enclosed pursuant to I.1 above.

**III. FEES:**

There are no fees due because the requested document (a copy for which is enclosed) was originally transmitted to the Patent Office upon filing of the Application and appears to have been lost by the Patent Office.

The United States Patent and Trademark Office is hereby authorized to charge the following fees to Deposit Account No. 01-1651 (a duplicate of this document is enclosed):

- [ ] Filing Fee - Original Patent Application [37 CFR 1.16(a)]  
 [ ] Fees for Claims:  
     [ ] each independent claim in excess of 3 [37 CFR 1.16(f)]  
     [ ] each claim in excess of 20 [37 CFR 1.16(c)]  
     [ ] each multiple dependent claim(s) [37 CFR 1.16(d)]  
 [ ] Applicant petitions for an extension of time, the fees for which are set out in 37 CFR 1.17(a)-(d), for the total number of months checked below:

<u>Extension (months)</u>	<u>Fee (for other than small entity)</u>
[ ] 1 month	\$ 110.00
[ ] 2 months	370.00
[ ] 3 months	870.00
[ ] 4 months	1,360.00

If an additional extension of time is required please consider this a petition therefor.

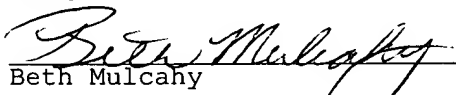
- [ ] Late filing of original declaration or oath 37 CFR 1.16(e). 0.00  
 (NO FEE REQUIRED)  
 Total fees: \$0.00

- [X] The Commissioner is hereby authorized to charge **any additional fees** which may be required, or credit any overpayment, to Deposit Account No. 01-1651.

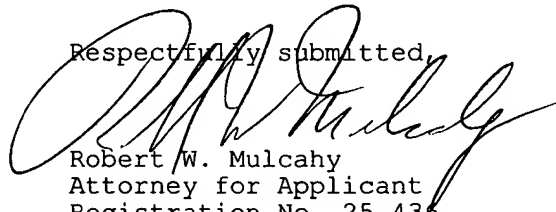
It is hereby respectfully submitted that the enclosed documents complete the filing of the above-named patent application and justify the filing date of OCTOBER 1, 1998. Please telephone the undersigned at (408)-563-2726 if there are any questions regarding this matter.

APPLIED MATERIALS, INC.  
 Legal Affairs Department  
 3050 Bowers Ave., MS/2634  
 Santa Clara, CA. 95054

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C., 20231, on 11/24/1998.

  
 Beth Mulcahy

Respectfully submitted,

  
 Robert W. Mulcahy  
 Attorney for Applicant  
 Registration No. 25,436



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARK  
Washington, D.C. 20231

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO./TITLE
09/165,248	10/01/98 RATHI		S AMAT/2966/F

PATENT COUNSEL  
APPLIED MATERIALS INC  
P O BOX 450-A  
SANTA CLARA CA 95052

0242/1020  
(NO FEE REQUIRED)

NOT ASSIGNED

2811

DATE MAILED:

10/20/98

### NOTICE TO FILE MISSING PARTS OF APPLICATION Filing Date Granted

An Application Number and Filing Date have been assigned to this application. The items indicated below, however, are missing. Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file all required items and pay fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a). If any of items 1 or 3 through 5 are indicated as missing, the **SURCHARGE** set forth in 37 CFR 1.16(e) of ☐ \$65.00 for a small entity in compliance with 37 CFR 1.27, or ☐ \$130.00 for a non-small entity, must also be timely submitted in reply to this NOTICE to avoid abandonment.

**If all required items on this form are filed within the period set above, the total amount owed by applicant as a**

☐ **small entity (statement filed)** ☐ **non-small entity** is \$ \_\_\_\_\_.

☐ 1. The statutory basic filing fee is:

- ☐ missing.
- ☐ insufficient.

Applicant must submit \$ \_\_\_\_\_ to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).

☐ 2. Additional claim fees of \$ \_\_\_\_\_, including any multiple dependent claim fees, are required.

\$ \_\_\_\_\_ for \_\_\_\_\_ independent claims over 3.

\$ \_\_\_\_\_ for \_\_\_\_\_ dependent claims over 20.

\$ \_\_\_\_\_ for multiple dependent claim surcharge.

Applicant must either submit the additional claim fees or cancel additional claims for which fees are due.

☐ 3. The oath or declaration:

- ☐ is missing or unexecuted.
- ☐ does not cover the newly submitted items.
- ☐ does not identify the application to which it applies.
- ☐ does not include the city and state or foreign country of applicant's residence.

An oath or declaration in compliance with 37 CFR 1.63, including residence information and identifying the application by the above Application Number and Filing Date is required.

☐ 4. The signature(s) to the oath or declaration is/are by a person other than inventor or person qualified under 37 CFR 1.42, 1.43 or 1.47.

A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.

☒ 5. The signature of the following joint inventor(s) is missing from the oath or declaration:

Keagan Huang

An oath or declaration in compliance with 37 CFR 1.63 listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Filing Date, is required.

☐ 6. A \$50.00 processing fee is required since your check was returned without payment (37 CFR 1.21(m)).

☐ 7. Your filing receipt was mailed in error because your check was returned without payment.

☐ 8. The application does not comply with the Sequence Rules.

See attached "Notice to Comply with Sequence Rules 37 CFR 1.821-1.825."

☐ 9. OTHER:

Direct the reply and any questions about this notice to "Attention: Box Missing Parts."

**A copy of this notice MUST be returned with the reply.**

M. Middleton  
Customer Service Center

Initial Patent Examination Division (702) 308-1202